

EX PARTE OR LATE FILED

**BELLSOUTH**

**Kathleen B. Levitz**  
Vice President-Federal Regulatory

Suite 900  
1133-21st Street, N.W.  
Washington, D.C. 20036-3351  
202 463-4113  
Fax: 202 463-4198  
Internet: levitz.kathleen@bsc.bls.com

April 9, 1999

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
The Portals  
445 12<sup>th</sup> Street S.W.  
Washington, D.C. 20554

**RECEIVED**

**APR 09 1999**

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**

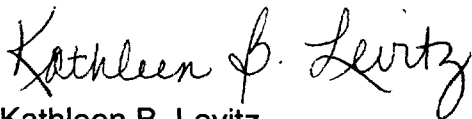
Re: Written Ex Parte in CC Docket No. 98-121

Dear Ms. Salas:

Attached is a copy of a written ex parte sent by facsimile on April 9, 1999 to Jake Jennings of the Common Carrier Bureau's Policy and Program Planning Division.

Pursuant to Section 1.1206(b)(1) of the Commission's rules, I am filing two copies of this notice and that written ex parte presentation in CC Docket 98-121 and ask that you please place both in the record of that proceeding.

Sincerely,



Kathleen B. Levitz  
Vice President-Federal Regulatory

Attachment

cc: Jake Jennings  
Kathryn C. Brown  
Larry Strickling  
Carol Matthey  
Michael Pryor  
Donald Stockdale  
Jordan Goldstein

No. of Copies rec'd 0+2  
List ABCDE

**BellSouth's Proposal for Self Effectuating  
Enforcement Measures  
April 8, 1999**

## OUTLINE

INTRODUCTION .....	2
EXECUTIVE SUMMARY .....	2
MEASUREMENTS .....	4
REPORTING .....	5
BENCHMARKS .....	5
TESTS FOR PARITY .....	6
REMEDIES .....	7
IMPLEMENTATION .....	7
COMMENTS ON CLEC PROPOSALS .....	7
STRENGTHS OF BELL SOUTH'S PROPOSAL .....	8
ATTACHMENT A - Matrix of proposed measurements .....	9
ATTACHMENT B - Explanation of calculations .....	16
for enforcement payments	
ATTACHMENT C - Measurement Details .....	21

## **INTRODUCTION**

BellSouth has entered into over 400 contracts with CLECs in the nine BellSouth states. These contracts have been approved by the various state Public Service Commissions. A number of these cases were arbitrated and included the issue of whether the PSC or arbitrator should order liquidated damages and/or penalties as part of the contract. In each case, the commission and/or the arbitrator declined to order liquidated damages or penalties as part of the decision.

Additionally, in Georgia, a full evidentiary hearing was conducted by the PSC specifically to deal with the issue of measurements. Once again, no self-effectuating enforcement measures were ordered by that commission as a result of the hearing. The Georgia order instead, pointed to that commissions its own enforcement authority under existing statutes .

The proposal we now present is a voluntary proposal of BellSouth, which will take effect under BellSouth's contracts with the CLECs, but should not be interpreted as admitting in any way that the PSCs or FCC have the authority to impose self-executing penalties or liquidated damages without BellSouth's agreement.

BellSouth is making this offer as one means of breaking through the clutter and minutiae of the service measurements of multiple processes and instead focusing on the real issues of market entry.

## **EXECUTIVE SUMMARY**

BellSouth has conducted a series of discussions with the FCC staff since the second petition for 271 relief for Louisiana was denied. In its order denying that, the FCC stated that it believed that a system of self-effectuating enforcement measures should be established by BellSouth in the public interest, to insure that BellSouth does not backside in providing services provided for the CLECs after 271 authority is granted. BellSouth is committed to opening the local market to entry by others and firmly believes that it has taken the steps necessary to do this. As a result of these discussions with the FCC, BellSouth has prepared this proposal which describes a set of enforcement measures that BellSouth is willing to put in place, subject to the terms and conditions described in this document.

BellSouth is proposing that 9 key measures, measured monthly, and disaggregated into a total of 14 categories that will satisfy the goal of the FCC, of protecting against BellSouth's "backsliding" in the provision of service to the CLECs for all three market entry methods: resale; unbundled network elements; and interconnection. These key measures are based on

measures in BellSouth's existing Service Quality Measurements. There are many other process measures that underlie these 9 key measures. These process measures will continue to be reported in BellSouth's SQM, and will be useful to the CLECs and BellSouth for analysis of business processes, but will not be used as part of this enforcement mechanism.

BellSouth has been analyzing a series of different types of statistical tests capable of measuring parity (as part of a series of workshops conducted by the Louisiana PSC). At this time, there is no consensus on a single test that adequately protects the interests of both BellSouth and the CLECs, although the "modified jackknife" method of analysis holds some promise of satisfying all the parties.

In the interim, this proposal provides simple, "bright line" tests that:

- (1) Provide a retail analog for each measurement or benchmark;
- (2) Establish an acceptable level of variance from BellSouth's performance that recognizes that the aggregate CLEC results may differ from BellSouth's retail unit results and still not "materially" affect the CLECs, and;
- (3) Establish a standard for making enforcement payments to the CLECs, if this "material" variance is exceeded.

BellSouth's proposal measures the results for all CLECs aggregated at a state level, and compares those measures to the specified retail analog. Then, if the CLEC aggregate results are "materially" different from BellSouth's results, the proposal provides for a specific enforcement payments to each individual CLEC, based on the services and function being measured.

For example, one of the key measures proposed is a measure of Missed Due Dates comparing all of BellSouth's retail services with old resale services and loop-port combinations provided to the CLECs. If the levels of Missed Due Dates are materially different (>1%), the enforcement measures are triggered, and a payment is made to each CLEC, refunding the Non-Recurring Charge for all orders in that category where BellSouth missed the due date.

The levels of payment proposed in these enforcement mechanisms are based on long standing contractual agreements between BellSouth and its Interexchange Carrier Customers, IXC's. These existing contractual arrangements compensate the IXC's for performance failures in the areas of installation, maintenance, and billing, and are based on the NonRecurring (NRC) and Recurring Charges (RC) the IXC would have paid if the service objectives had been met.

The payments in this proposal are similar in that:

- (1) They compensate the CLEC based on the charges for a service BellSouth committed to perform and then did not perform as specified, and;
- (2) When a "parity" failure is detected the CLEC is compensated for EVERY instance of service failure that month (as opposed to those "misses" beyond parity), thus returning the CLEC to the financial position of perfect service. To this extent, BellSouth's proposal goes beyond any imaginable requirement in the law.

This concept, using an aggregate measurement to determine parity, and then making enforcement payments to individual CLECs based on the performance they have received, ties together:

- (1) The objectives of public interest (verifies that parity is being provided on an overall basis), and;
- (2) The interests of individual CLECs (if a failure in service occurs and parity is not being provided, the CLEC is compensated based on the individual performance received.)

## **MEASUREMENTS**

Certain key measurements selected from the entire set of BellSouth SQM will be tested for "parity" in this proposal. Additional, detailed descriptions of the measurements are given in attachment C.

The key measurements proposed are:

Installation Timeliness:	Percent Missed Due Dates
Installation Quality:	Percent Repair reports within 4 days of installation
Repair Timeliness:	Percent Missed Appointments
Repair Quality:	Percent Repeat Reports
Billing:	Usage Timeliness
Billing:	Invoice Timeliness
Operating Support Systems (OSS):	Percent Availability
Collocation:	Due Dates Met
Trunking:	% Aggregate Blocked Calls

## **REPORTING**

BellSouth will continue to collect data directly from the various CLEC and legacy systems described in its Service Quality Measurements (SQM). These data will be collected in the Performance Measurements Analysis Platform system (PMAP) and will continue to be used to generate SQM reports to meet regulatory reporting requirements and individual CLEC reports required to meet regulatory and contractual reporting obligations. These data will also continue to be given to individual CLECs. Additionally, for the purposes of this proposal, the same data will be used to report on the key measures included in the enforcement mechanisms.

The data will be aggregated as described in the Benchmark Section to produce groups of BellSouth's retail services and group of CLEC resale or unbundled Network Elements that can be properly compared as analogous.

These measurements will be made on a monthly basis, and will include all data obtained during the month, except as specified in the detailed exclusions.

## **BENCHMARKS**

**RETAIL ANALOGS:** Each measure (except collocation) has a specific retail analog measurement, designed to reflect similar services that BellSouth provides for its retail customers. These retail analogs are:

**RESALE:** Results for all BellSouth retail services are grouped together (residence, business, and designed services), and are compared to the services provided for the CLECs at resale. The loop+port combinations provided to the CLECs are also included in this category, because these combinations are essentially identical to the resold services.

**UNE:** Results for all Unbundled Network Elements (except loop+port combinations) are aggregated together and are compared to an aggregate of BellSouth's retail residence and business services that require an outside dispatch. Since the unbundled loops that constitute the major portion of this category may be used to serve either residential or business customers, and require conversion at the central office frame or dispatch to the customer premise, it is reasonable to compare UNEs to an aggregate of similar services – both residence and business.

BILLING USAGE TIMELINESS: Results for delivery of daily usage data (local and access) to the CLECs are aggregated and compared to BellSouth's delivery of CMDS data between BellSouth different regional accounting offices over the same time period.

BILLING INVOICE TIMELINESS: Results for delivery of invoices to the CLECs are calculated for two categories, Resale invoices and UNE invoices, and are compared to BellSouth's delivery of invoices to its retail units.

OSS AVAILABILITY: Results for specified BellSouth retail unit operating support systems are aggregated and compared directly to the results for CLEC OSS provided by BellSouth.

COLLOCATION: There is not a specific retail analog for this service, so the benchmark of the space available due date (negotiated between the CLEC and BST) is used for this measurement.

1. TRUNK BLOCKING: This measures & compares the average monthly blocking (on an hour-by hour basis) for BST trunks linked to the CLEC network and the BST local trunking network.

#### **FURTHER CONDITIONS:**

No enforcement mechanism will be put in place until BST receives 271 approval from the FCC for a given state.

The penalties are structured to provide no incentive for the CLEC community to prefer the remedy over quality service.

A finding (statistical or materiality) of apparent disparity is not an irreversible finding of discrimination.

#### **TESTS FOR PARITY:**

- 1) BellSouth has been analyzing a series of different types of statistical tests capable of measuring parity (as part of a series of workshops conducted by the Louisiana PSC). At this time, there is no consensus on a single test that adequately protects the interests of both BellSouth and the CLECs, although the "modified jackknife" method of analysis holds some promise of satisfying all the parties. BellSouth has been working with the Louisiana Public Service Commission, and their consultant on this matter for several months. BellSouth has also retained Dr.

Fritz Scheuren, a renowned statistician, who has assisted in the analysis, and has held numerous discussions with the Common Carrier bureau staff on the results and status of this analysis.

- 2) Any test for parity will ultimately include tests for both statistical significance and materiality.
- 3) In the interim, until statistical tests are validated by two BST state commissions or by the FCC, a simple test of materiality will be used.

### **REMEDIES**

The payments in this proposal are structured to:

- 1) Compensate the CLEC based on the charges for a service BellSouth committed to perform and then did not perform as specified, and;
- 2) When a "parity" failure is detected BellSouth will compensate the CLEC for EVERY instance of service failure that month, thus returning the CLEC to the financial position of perfect service.

The calculations for these remedies are explained in detail in Attachment B.

### **IMPLEMENTATION**

These enforcement measures will be put in place by adding them to existing contracts between BellSouth and the CLECs, immediately after a 271 petition is approved by the FCC. Once they are added to any contract in state, the enforcement measures will be structured so that any CLEC can selectively add these provisions to its contract using the "pick and choose" mechanism.

### **COMMENTS ON CLEC PROPOSALS**

Several of the CLECs have joined together in a consortium called the Local Competitive Users Group, LCUG. This group has prepared a series of detailed proposals for service quality measurements, statistical validation of service differences, and penalties for failures to meet certain measures.



These measures include all of the key measures in this proposal, and dozens of other measurements of both outcomes and processes.

BellSouth's position is, and has been, that the LCUG proposal is overly complex and burdensome, both in the number and complexity of the measures proposed, and in the depth of disaggregation of geography and services suggested. LCUG would have BellSouth capture and produce data for hundreds of different scenarios each month, and then try to produce a meaningful overall analysis from those measures with a statistical methodology (the modified z-test) that has known flaws in this type of application. LCUG's proposal goes far beyond business measurements meaningful to the actual end users of the service that can be analyzed by the state commissions and the FCC to insure that the aims of the Telecommunications Act are being carried out.

**STRENGTHS OF BELL SOUTH'S PROPOSAL:**

BellSouth's proposal, on the other hand is:

Limited to key measures that capture the outcomes of processes, *i.e.*, services provided to end-users.

Offers a simple, easily understood test for "parity", until the industry can arrive at a consensus on the application of statistical tests for these measures.

**Proposed VSEEM Matrix:**

<b>CATEGORY</b>	<b>METRIC</b>	<b>SUB-CATEGORY</b>	<b>PARITY DETERMINATION</b>	<b>MATERIALITY TEST</b>	<b>VSEEM NRC=NON RECURRING CHARGE RC=RECURRING CHARGE</b>
<b>INSTALLATION</b>					
<b>Installation Timeliness</b>  (Calculations Made at State Aggregate Levels)	% Service Order Due Dates Missed for BST Caused Reasons	Resale/Combo	Retail Analog	CLEC variance with BST cannot be more than 1% at the state aggregate level	Resale NRC * Number of Missed Installation Appointments. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. (See Note 1 on Matrix Details "Attachment B")
		UNE	Retail Analog  (Retail-Installation Residence/Business Dispatch)	CLEC variance with BST cannot be more than 1% at the state aggregate level	UNE NRC * Number of Missed Installation Appointments. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. (See Note 1 on Matrix Details "Attachment B")

<b>Installation Quality</b>  (Calculations Made at State Aggregate Levels)	% Trouble Reports within 4 days for BST Caused Reasons	Resale/Combo	Retail Analog	CLEC variance with BST cannot be more than 1% at the state aggregate level	50% monthly Resale RC * Number of repeated customer trouble reports within 4 days. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. <i>(See Note 2 on Matrix Details "Attachment B")</i>
		UNE	Retail Analog  (Retail-Installation Residence/Business Dispatch)	CLEC variance with BST cannot be more than 1% at the state aggregate level 1	50% monthly UNE RC * Number of repeated customer trouble reports within 4 days. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. <i>(See Note 2 on Matrix Details "Attachment B")</i>

<b>MAINTENANCE</b>					
<b>Repair Timeliness</b>  (Calculations Made at State Aggregate Levels)	% Missed Repair Appointments for BST Caused Reasons	Resale/Com bo	Retail Analog	CLEC variance with BST cannot be more than 1% at the state aggregate level	50% monthly Resale RC* Missed Repair Appointments. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. (See Note 3 on Matrix Details "Attachment B")
		UNE	Retail Analog [Retail-Repair Residence/Business Dispatch]	CLEC variance with BST cannot be more than 1% at the state aggregate level	50% monthly UNE RC * Number of Missed Repair Appointments. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. (See Note 3 on Matrix Details "Attachment B"))

<b>Repair Quality</b>  (Calculations Made at State Aggregate Levels)	% Repeated Report Rate	Resale/Combo	Retail Analog	CLEC variance with BST cannot be more than 1% at the state aggregate level	50% monthly Resale RC * Number of repeated customer trouble reports within 30 days. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. <i>(See Note 4 on Matrix Details "Attachment B")</i>
		UNE	Retail Analog  [Retail-Repair Residence/Business Dispatch]	CLEC variance with BST cannot be more than 1% at the state aggregate level	50% monthly UNE RC* Number of Repeated Customer Trouble Reports within 30 days. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. <i>(See Note 4 on Matrix Details "Attachment B")</i>

<b>BILLING</b>					
Billing  (Calculations Made at the Regional Level)	Usage Data Delivery Timeliness		Retail Analog	1 day variance	>1 day = 25% * Monthly Optional Daily Usage File (ODUF) / Access Daily Usage File (ADUF). The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test.  (See Note 5 on Matrix Details "Attachment B")
	Invoice Timeliness	RESALE (CRIS)	Retail Analog	1 day variance	.000493 * Total monthly bill for each 1 day out of parity. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test.  (See Note 6 on Matrix Details "Attachment B")
		UNE (CRIS UNE + CABS)	Benchmark	1 day variance	.000493 * Total monthly bill for each 1 day out of parity. The VSEEM calculation applies only in a month where the benchmark is not met.  (See Note 6 on Matrix Details "Attachment B")

<b>OPERATIONAL SUPPORT SYSTEMS</b>					
OSS (Regional)	Pre-ordering and ordering OSS Availability		Retail Analog	1% difference aggregated across access to all systems	Credit for 5% of total order volume at a rate of \$20/per order handled for each 1% disparity in access. The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test. <i>(See Note 7 on Matrix Details "Attachment B")</i>
<b>COLLOCATION</b>					
Collocation (Individual case)	% DD Missed		Benchmark	No Due dates Missed	Percent Due Dates Missed * NRC / week beyond due date, capped at 25%. The VSEEM calculation applies only in a month where the benchmark of "zero" missed due dates is not met.  <i>(See Note 8 on Matrix Details "Attachment B")</i>

TRUNK GROUP PERFORMANCE					
Trunking  (Calculations Made at State Aggregate Levels)	Trunk Blockage		Retail Analog	Any 2 hours month >0.5 difference in aggregate blockage	Any 2 hours/ month > 0.5% difference triggers an increase in Reciprocal Compensation Usage payments based on the difference in actual blockage for the hours "missed". The VSEEM calculation applies only in a month where BST results are better following the application of the monthly Materiality Test.  (See Note 9 on Matrix Details "Attachment B")



## Matrix Details

Note #	VSEEM Measure	Category	Parity Calculation
1	Installation Timeliness	% Due Dates Missed	<p><u>Calculation:</u> When a Materiality Test failure occurs at the state level, each CLEC with missed appointments on service orders in this category will be compensated for the failure to meet the BST commitment(s). The CLEC's actual number of missed appointments will be multiplied by the NRC. Separate calculations will be made for the Resale and UNE categories.</p>
			<p><u>UNE Analog Methodology:</u> The analog for UNEs will be the combined missed Due Date rate of Residence/Business POTS dispatch. Unbundled loops constitute a majority of the UNE category, which can serve either residential or business customers and require conversion at the central office and/or the customer location. Thus, they have been compared to an aggregate of retail residence and business dispatched service requests.</p>
2	Installation Quality	% Report w/in 4 days	<p><u>Calculation:</u> When a Materiality Test failure occurs at the state level, each CLEC with repeated reports within 4 days on service orders in this category will be compensated for the failure to meet the retail analog/materiality test. The CLEC's actual number of repeated reports will be multiplied by the RC. Separate calculations will be made for the Resale and UNE categories</p>
			<p><u>UNE Analog Methodology:</u> The analog for UNEs will be the combined missed DD rate of Residence/Business POTS dispatch.</p> <p>Unbundled loops constitute a majority of the UNE category, which can serve either residential or business customers and require conversion at the central office and/or the customer location. Thus, they have been compared to an aggregate of retail residence and business dispatched service requests.</p>

3	Repair Timeliness	% Missed Repair Appts	<u>Calculation:</u> When a Materiality Test failure occurs at the state level, each CLEC with missed appointments on trouble reports in this category will be compensated for the failure to meet the BST commitment(s). The CLEC's actual number of missed appointments will be multiplied by the RC. Separate calculations will be made for the Resale and UNE categories
			<u>UNE Analog Methodology:</u> The analog for UNEs will be the combined missed DD rate of Residence/Business POTS dispatch. Unbundled loops constitute a majority of the UNE category, which can serve either residential or business customers and require conversion at the central office and/or the customer location. Thus, they have been compared to an aggregate of retail residence and business dispatched service requests.
4	Repair Quality	Repeated Report Rate	<p><u>Calculation:</u> When a Materiality Test failure occurs at the state level, each CLEC with repeated reports within 30 days of a trouble report in this category will be compensated for the failure to meet the retail analog/materiality test. The CLEC's actual number of repeated reports will be multiplied by the RC. Separate calculations will be made for the Resale and UNE categories.</p> <p><u>UNE Analog Methodology:</u> The analog for UNEs will be the combined missed DD rate of Residence/Business POTS dispatch.</p> <p>Unbundled loops constitute a majority of the UNE category, which can serve either residential or business customers and require conversion at the central office and/or the customer location. Thus, they have been compared to an aggregate of retail residence and business dispatched service requests.</p>

5	Billing	Usage Timeliness	<u>Calculation:</u> If CLEC results are greater than 1 day, then the following calculation will apply: $25\% * \text{Monthly Optional Daily Usage File (ODUF)} / \text{Access Daily Usage File (ADUF)}$ sales charges.
			<u>VSEEM Methodology:</u> A 25% VSEEM rate is applied to the formula as noted in the calculation above. This rate was selected in order to present a significant VSEEM to the CLEC community in the event of disparate billing performance.
6		Invoice Timeliness	<u>Calculation:</u> A value of $.000493 * \text{Total monthly bill for each day out of parity}$ .
			<u>VSEEM Methodology:</u> The VSEEM is based on the business inconvenience caused to the CLEC by a delay in delivering the billing information they need, and is based on an 18%/yr rate for each whole days delay of their billing data.

7	OSS	Pre-ordering and ordering OSS Availability	<p><u>Calculation:</u> System availability will be compared to BST's retail systems as currently defined in the SQM (based on scheduled availability). The total availability for LENS, EDI, TAG, LEO MAINFRAME, LEO-UNIX, LESOG, HAL, and BSOG will be compared to the availability of SOCS, RSAG, DSAP, BOCRIS, and ATLAS/COFFI. In the event that a difference favoring the BST by &gt;1 % occurs in a given month, a \$20 cost for manual handling will be multiplied by the actual number of electronically submitted service requests to produce the VSEEM amount.</p>
			<p><u>VSEEM Methodology:</u> The VSEEM payment is based on compensating the CLECs for manual handling of orders on a sliding scale based on the difference between BST's systems and the CLEC systems. Manual handling of service requests may be necessary for the CLECs in the event that they are unable to electronically submit their requests.</p>
8	Collocation	% DD Missed	<p><u>Calculation:</u> The NRC in this case is the total of all space preparation and application fees for the specific collocation job. Any supplements to the original order will reset the due date (as agreed to by BST and CLEC) for this measurement.</p> <p><u>VSEEM Methodology:</u> The NRC of \$45,000 represents an average charge to the CLECs requesting collocation arrangements and follows the same principles of missed due dates/commitments used in the provisioning and maintenance arenas.</p>

9	Trunking	Trunk Blockage	<p><u>Calculation/VSEEM Methodology:</u></p> <p>This VSEEM is based on the new trunk blocking parity measurement.</p> <p>This measurement will define the difference in blocking at the state (or MSA) level for all CLEC trunk groups as compared to all BST local trunk groups. There are 24 aggregate measurements (one per hour) to be compared. A parity failure is defined as any 2 hours when the CLEC aggregate exceeds the BST aggregate by more than 0.5%.</p> <p><b>The VSEEM payment would be calculated by determining the difference in blockage for each hour where the CLEC exceeded BST, dividing the result by 16 (average usage hours/day), and increasing the CLECs Reciprocal Compensation payment by the amount.</b></p> <p>For example, if 4 hours exceed the 0.5 threshold, a failure would be triggered. If the differences in % blockage were 1%, 2%, 1%, and 3%, the calculation would be <math>(.01 + .02 + .01 + .03) / 16 = 0.43\%</math>, and the CLEC would be paid a 0.43% VSEEM payment based on their monthly reciprocal compensation usage payment. I.E. if the reciprocal comp usage payment they received was \$500,000, the VSEEM would be <math>0.43\% * \\$500,000 = \\$2150</math>.</p> <p>If we failed by 1% for 16 hours, the VSEEM payment would be <math>1\% * \\$500,000 = \\$50,000</math>.</p> <p>This method ties the VSEEM payment to the CLECs actual usage during the month, but uses a simply, easily calculated formula.</p>
---	----------	----------------	---

## Modified Service Quality Measurements Descriptions<sup>1</sup>

### TABLE OF CONTENTS

CATEGORY	FUNCTION	VSEEM PAGE #
Pre-Ordering and Ordering OSS	1. OSS Interface Availability	2
Provisioning	2. Percent Missed Installation Appointments 3. Percent Provisioning Troubles within 4 days	3 4
Maintenance & Repair	4. Missed Repair Appointments 5. Percent Repeat Troubles within 30 days	5 6
Billing	6. Invoice Timeliness 7. Usage Data Delivery Timeliness	7 8
Collocation	9. % of Due Dates Met	9
Trunk Group Performance	8. Trunk Group Service Comparison	10, 11

***<sup>1</sup>Selected VSEEM Measures have been excerpted from the standard BST-Service Quality Measurements and their descriptions have been enhanced or modified for the purposes of this discussion.***

## PRE-ORDERING AND ORDERING OSS

<b>Function:</b>	<b>OSS Interface Availability</b>
<b>Measurement Overview:</b>	This measurement captures the availability percentages for the BST systems that the CLEC uses during pre-ordering and ordering. Comparisons to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.
<b>Measurement Methodology:</b>	<p><b>1. OSS Interface Availability = (Actual Availability)/(Scheduled Availability) X 100</b></p> <p><b>Definition:</b> Percent of time OSS interface is actually available compared to scheduled availability. Availability percentages for CLEC interface systems and for all legacy systems accessed by them are captured.</p>

### OSS Interface Availability

OSS Interface	% Availability
LENS	x
LEO Mainframe	x
LEO UNIX	x
LESOG	x
EDI	x
HAL	x
BOCRIS	x
ATLAS/COFFI	x
RSAG/DSAP	x
SOCS	x

**PROVISIONING**

<b>Function:</b>	<b>Installation Timeliness</b>
<b>Measurement Overview:</b>	The “percent missed installation appointments” measure monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
<b>Measurement Methodology:</b>	<p><b>1. Percent Missed Installation Appointments = <math>\frac{\text{Number of Orders missed in Reporting Period}}{\text{Number of Orders Completed in Reporting Period}} \times 100</math></b></p> <p>Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. <i>Missed Appointments caused by end-user reasons will be included and reported separately.</i></p> <p><b>Definition:</b> Percent of orders where completions are not done by due date. See “Exclude Situations” for orders not included in this measurement</p> <p><b>Methodology:</b></p> <ul style="list-style-type: none"> <li>• Mechanized metric from ordering system</li> </ul>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• State,</li> <li>• Reporting Levels <ul style="list-style-type: none"> <li>• Resale</li> <li>• UNE</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Orders canceled by the CLEC</li> <li>• Order Activities of BST associated with internal or administrative use of local services.</li> <li>• Orders missed due to CLEC and/or End User causes</li> </ul>



<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Order Submission Date</li> <li>• Order Submission Time</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Status Notice Time</li> <li>• Standard Order Activity</li> <li>• State, and further geographic disaggregation as required by State Commission Order</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date</li> <li>• Order Submission Time</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Status Notice Time</li> <li>• Standard Order Activity</li> <li>• State, and further geographic disaggregation as required by State Commission Order</li> </ul>

<b>Function:</b>	<b>Installation Quality</b>
<b>Measurement Overview:</b>	The Percent Provisioning Troubles within 4 days of Installation measures the quality and accuracy of installation activities.
<b>Measurement Methodology:</b>	<p><b>1. % Provisioning Troubles within 4 days of Service Order Activity</b> = <math>\frac{\text{Trouble reports on all completed orders} \leq 4 \text{ days following service order(s) completion}}{\text{All Service Orders in a calendar month}} \times 100</math></p> <p><b>Definition:</b> Measures the quality and accuracy of completed orders by.</p> <p><b>Methodology:</b></p> <ul style="list-style-type: none"> <li>• Mechanized metric from ordering and maintenance systems.</li> </ul>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• State</li> <li>• Reporting Levels <ul style="list-style-type: none"> <li>• Resale/Combo</li> <li>• UNE</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Trouble reports canceled at the CLEC request</li> <li>• BST trouble reports associated with administrative service</li> <li>• Trouble reports associated with CPE/CPIW</li> <li>• Trouble reports "Found OK" after dispatch to outside field forces (e.g. Disposition Code 09XX)</li> </ul>

<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order</li> </ul>

**MAINTENANCE & REPAIR**

<b>Function:</b>	<b>Missed Repair Appointments</b>
<b>Measurement Overview:</b>	When the data for this measure is collected for BST and a CLEC it can be used to compare the percentage of accurate estimates of the time required to complete service repairs for BST and the CLEC.
<b>Measurement Methodology:</b>	<p><b>2. Percentage of Missed Repair Appointments = (Count of Customer Troubles Not Resolved by the Quoted Resolution Time and Date) / (Count of Customer Trouble Tickets Closed) X 100.</b></p> <p><b>Definition:</b> Percent of trouble reports not cleared by date and time committed. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.</p> <p><b>Methodology:</b> Mechanized metric from maintenance database(s).</p>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• State, and further geographic disaggregation as required by State Commission Order</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>• Resale/UNE Combos</li> <li>• UNE</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Appointments not met due to CLEC and/or End User causes</li> <li>• Trouble tickets canceled at the CLEC request</li> <li>• BST trouble reports associated with internal or administrative service</li> <li>• Trouble reports associated with CPE/CPIW</li> <li>• Trouble reports "Found OK" after dispatch to outside field forces (e.g. Disposition Code 09XX)</li> </ul>

<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Troubles</li> <li>• Total and Percent Missed Appointments</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order Report Month</li> <li>• CLEC Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Troubles</li> <li>• Total and Percent Missed Appointments</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order Report Month</li> <li>• BST Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> </ul>

<b>Function:</b>	<b>Quality of Repair</b>
<b>Measurement Overview:</b>	This measure, when collected for both the CLEC and BST and compared, monitors that CLEC maintenance requests are cleared comparably to BST maintenance requests.
<b>Measurement Methodology:</b>	<p><b>1. Percent Repeat Troubles within 30 Days = (Total Repeated Trouble Reports within 30 Days) / (Total Closed Troubles) in reporting period X 100</b></p> <p><b>Definition:</b> For Percent Repeat Trouble Reports within 30 Days: Trouble reports on the same line/circuit as a previous trouble report within the last 30 calendar days as a percent of total troubles reported.</p> <p><b>Methodology:</b> Mechanized metric from maintenance database(s).</p>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• State, and further geographic disaggregation as required by State Commission Order</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>• Resale/UNE Combos</li> <li>• UNE</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Trouble reports canceled at the CLEC request</li> <li>• BST trouble reports associated with administrative service</li> <li>• Trouble reports associated with CPE/CPIW</li> <li>• Trouble reports "Found OK" after dispatch to outside field forces (Disposition Code 09XX)</li> </ul>

<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Troubles</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order Report Month</li> <li>• CLEC Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Troubles</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order Report Month</li> <li>• BST Ticket Number</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Time</li> <li>• Ticket Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design/Non-Special only)</li> <li>• State, and further geographic dissagregation as required by State Commission Order</li> </ul>

**BILLING**

<b>Function:</b>	<b>Invoice Timeliness</b>
<b>Measurement Overview:</b>	The accuracy of billing invoices delivered by BST to the CLEC must provide CLECs with the opportunity to deliver bills at least as accurate as those delivered by BST. Producing and comparing this measurement result for both the CLEC and BST allows a determination as to whether or not parity exists.
<b>Measurement Methodology:</b>	<p><b>2. Mean Time to Deliver Invoices</b> = <math>\Sigma[(\text{Invoice Transmission Date}) - (\text{Date of Scheduled Bill Close})] / (\text{Count of Invoices Transmitted in Reporting Period})</math></p> <p>This measure provides the mean interval for billing invoices. CRIS-based invoices should be released for delivery within six (6) workdays, and CABS-based invoices should be released for delivery within eight (8) calendar days.</p> <p><b>Objective:</b> Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format.</p>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	<ul style="list-style-type: none"> <li>• Any invoices rejected due to formatting or content errors</li> <li>• Adjustments not related to billing errors (e.g., credits for service outage)</li> </ul>
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Invoice Type <ul style="list-style-type: none"> <li>■ Resale</li> <li>■ Unbundled Element Invoices (UNE)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Retail Type <ul style="list-style-type: none"> <li>■ CRIS</li> <li>■ CABS</li> </ul> </li> </ul>

**BILLING (Continued)**

<b>Function:</b>	<b>Usage Data Delivery Timeliness</b>
<b>Measurement Overview:</b>	The accuracy of usage records delivered by BST to the CLEC must provide CLECs with the opportunity to deliver bills at least as accurate as those delivered by BST. Producing and comparing this measurement result for both the CLEC and BST allows a determination as to whether or not parity exists.
<b>Measurement Methodology:</b>	<p><b>3. Usage Data Delivery Timeliness = (Total number of usage records sent within six(6) calendar days from initial recording/receipt) / (Total number of usage records sent)</b></p> <p>This measurement provides percentage of recorded usage data (BellSouth recorded and usage recorded by other carriers) delivered to the appropriate CLEC within six (6) calendar days from initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS.</p> <p><b>Objective:</b> The purpose of these measurements is to demonstrate the level of quality and timeliness of processing and transmission of both types of usage data (BellSouth recorded and usage recorded by other carriers) to the appropriate CLEC.</p> <p><b>Methodology:</b> The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC. Timeliness and completeness measures are reported on the same report.</p>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type <ul style="list-style-type: none"> <li>■ BellSouth Recorded</li> <li>■ Non-BellSouth Recorded</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Record Type</li> </ul>



**Collocation**

<b>Function:</b>	<b>Response Interval, Provisioning Interval and Timeliness for Providing Collocation Space to a CLEC in a BellSouth Central Office.</b>
<b>Measurement Overview:</b>	Collocation is the placement of customer-owned equipment in BellSouth Central Offices for interconnecting to BellSouth's tariffed services and unbundled network elements. Although BellSouth offers both Virtual and Physical Collocation, only due dates for Physical requests will be included in this metric. The vehicle for tracking the BST commitment to the CLEC is the "Percentage of due dates on firm orders missed".
<b>Measurement Methodology:</b>	<p><b>1. % of Due Dates Missed = (Number of Orders not completed w/i ILEC committed Due Date during reporting period) / (Number of Orders completed in reporting period) X 100.</b></p> <p><b>Definition:</b> Measures the percent of Collocation space request, including construction and network infrastructure, that are not complete on the due date.</p> <p>Methodology: Current-Manual, Future-Mechanized</p>

<b>Reporting Dimensions:</b>	<b>Excluded Situations:</b>
<ul style="list-style-type: none"> <li>• State, and further geographic dissagregation as required by State Commission Order</li> <li>• Physical</li> </ul>	<ul style="list-style-type: none"> <li>• Any order canceled by the CLEC.</li> <li>• Time for BST to obtain any permits</li> <li>• Collocation contract negotiations</li> </ul>
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Application Submission Date</li> <li>• Firm Order Submission Time</li> <li>• Space Acceptance Date</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Application</li> <li>• Application Response</li> <li>• Firm Order</li> <li>• BST Completion Date</li> </ul>

**TRUNK GROUP PERFORMANCE**

<b>Function:</b>	<b>Interconnection Trunk Performance</b>
<b>Measurement Overview:</b>	In order to ensure quality service to the CLECs as well as protect the integrity of the BST network, BST collects traffic performance data on the trunk groups interconnected with the CLECs as well as all other trunk groups in the BST network.
<b>Measurement Methodology:</b>	<p><b>1. Trunk Group Performance: Contains the service performance results of the following high use and final trunk groups carrying comparable CLEC and BST traffic:</b></p> <ol style="list-style-type: none"> <li>1. BellSouth End-Office to BellSouth Access Tandem</li> <li>2. BellSouth End-Office to CLEC Switch</li> <li>3. BellSouth Local Tandem to CLEC Switch</li> <li>4. BellSouth Access Tandem to CLEC Switch</li> <li>5. BellSouth End-Office to BellSouth Local Tandem</li> <li>6. Inter-Tandem Trunk Groups</li> <li>7. BellSouth End-Office to BellSouth End-Office</li> </ol> <p>Method of Calculation:</p> <ul style="list-style-type: none"> <li>• First, the daily blocking is calculated for each trunk group as the overflow divided by call attempts for each hour on a given day.</li> <li>• Next the weekly blocking is calculated as the average of each day's blocking by hour.</li> <li>• Next the monthly blocking is calculated as the weighted average across all weeks for each hour with valid measurement data within the study period. The weighting factor is the number of valid measurement days.</li> <li>• Finally, the monthly aggregate blocking is calculated as the weighted average for all weeks for each hour with valid measurement data within the study period. The weighting factor is the number of trunks in service assigned to a trunk group included in the average.</li> </ul>

<b>Reporting Dimensions:</b> <ul style="list-style-type: none"> <li>• BST Trunk Group Aggregate</li> <li>• CLEC Trunk Group Aggregate</li> <li>• CLEC Trunk Group Specific</li> <li>• State, Region and further geographic dissagregation as required by state commission order</li> </ul>	<b>Excluded Situations:</b> <ul style="list-style-type: none"> <li>• Trunk groups for which valid traffic data measurement is unavailable</li> <li>• Trunk groups that are not relevant for comparison.</li> </ul>
<b>Data Retained Relating to CLEC Experience:</b> <ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Number of trunks assigned to each trunk group</li> <li>• Blocking by hour for each trunk group</li> <li>• State, region and further geographic dissagregation as required by state commission order</li> </ul>	<b>Data Retained Relating to BST Performance:</b> <ul style="list-style-type: none"> <li>• Report study period</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Number of trunks assigned to each trunk group</li> <li>• Blocking by hour for each trunk group</li> <li>• State, region and further geographic disaggregation as required by state commission order</li> </ul>